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ABSTRACT

The issue of alcohol use, with occasional reference to other drug use, by college students is reviewed in this report: which (1) summarizes what is known about the influence of collegiate environments on college student use of alcohol; and (2) suggests how campus policies and practices can be modified to create environmental conditions that have a positive, health-enhancing influence on college student behavior. The presentation is divided into four sections. First, several conceptions of the college environment are discussed. Next, the characteristics of college students who use alcohol are summarized. Then, the literature on environmental influences on college student alcohol use is examined covering campus physical properties, campus organizational properties, campus social-psychological properties, and campus cultural properties. Finally, conclusions and recommendations for institutional policies and practices, as well as areas that require additional research, are presented. An appendix contains a discussion of the five campus environmental factors that foster responsible, health-enhancing behavior. Contains 149 references. (GLR)

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Environmental Influences on Alcohol Use by College Students*

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Environmental Influences on Alcohol Use by College Students

"The arrangement of environments is probably the most powerful technique we have for influencing behavior" (Moos, 1974, p.4).

I. Introduction and Overview

Alcohol use by college students is almost universal. Surveys indicate that about 90% of undergraduates have used alcohol in the previous year, three quarters in the previous month (National Institute on Drug Abuse, 1990). The use of other drugs (e.g., marijuana, hallucinogens), however, has decreased appreciably since 1980 (National Institute on Drug Abuse, 1990). Reducing the amount and frequency of alcohol consumption on the campus is a formidable task because drinking is deeply imbedded in the collegiate culture (Brubacher & Rudy, 1976; Goodwin, 1989; Thoreson & Hosokawa, 1984). Moreover, drinking is normative behavior in the United States (Fischer, 1987); about 90% of all teens between the ages of 17-19 and about 70% of the general population over 21 years of age report using alcohol (Belohlav & Popp, 1983; Saltz & Elandt, 1986).

Despite the widespread use of beer, wine and liquor in American society, institutions of higher education are under increasing pressure to regulate the alcohol use of their students. Governmental agencies, parents, college and university faculty, staff and some students have become more vocal in their desire to promote responsible, health-enhancing behavior. Some of the more visible manifestations of this desire include the "University 50 Plus 12 Program" initiated by the National Institute on Alcoholism and Alcohol Abuse in 1973, the establishment of more than 200 chapters of BACCHUS (Boost Alcohol Consciousness Concerning the Health of University Students), and an expanding number of MADD (Mothers Against Drunk Driving) and SADD (Students

Against Drink Driving) chapters. Campus, state, and national task forces also have been formed to address issues related to the alcohol and other drug abuse on campus (Goodale, 1987).

Despite these efforts, presidents recently indicated that substance abuse (primarily alcohol) is the single greatest threat to the quality of campus life (Carnegie Foundation for the Advancement of Teaching, 1990). Also, federal legislation has been enacted to address the use of controlled substances by college students and faculty. The Drug Free Schools and Communities Act Amendments of 1989 (PL 101-226) and Drug Free Schools and Campuses Final Regulations issued in 1990 require that an institution notify students and employees that it has adopted and implemented a program "to prevent the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees on institutional property or at any of its activities." Moreover, institutions are expected to impose penalties for violations including expulsion or termination of employment and referral for prosecution. To put teeth into the legislation, an institution must comply--formally and in writing--with the provisions of PL 101-226 and the Drug Free Schools and Campuses Final Regulations to receive federal funds including guaranteed student loans or funds for research.

The presence of alcohol on campus has always created dilemmas for college and university administrators (Straus & Bacon, 1953). On the one hand, efforts to promote "responsible drinking" by students have been criticized because they have failed to reduce drinking, eliminate hazardous use of alcohol (Fischer, 1987), and reduce the negative behavior that often is associated with alcohol use. For example, over several year period at one research university in the northeast, 75% of campus police arrests, 80% of residence hall damages, 85% of sexual assaults, 70% of discipline referrals and 50% of suicide attempts were alcohol related (L. Upcraft, personal

communication, September 11, 1990). The experience of this particular institution is, unfortunately, not atypical.

On the other hand, heavy-handed security and enforcement measures are antithetical to the idea of a university, a purpose of which is to promote human growth, responsibility, and enlightened self-determination. Focusing on alcohol abuse often is accompanied by adverse publicity and strained relations with students and even some alumni (especially during the football season!). Yet the manner in which a college responds to alcohol and other drug-related problems imparts educational lessons to their students and sends strong messages about what the institution values.

Any comprehensive strategy to ameliorate hazardous use of alcohol must take into account three elements (Gonzalez, 1987): (a) the host--the student's biophysical-social susceptibilities to alcohol (e.g., alcohol has more rapid effects on women then men) and knowledge about alcohol and drinking behavior; (b) the agent--alcohol's chemical properties and effects; and (c) the environment--the settings in which drinking occurs (e.g., residence hall, fraternity house, rathskellar), availability of alcohol, peer influence and campus mores that shape drinking norms, and the legal sanctions, controls and policy regulations that govern alcohol use on and off campus.

Far more is known about the host (students' family history with alcohol and other drugs, sex, religious beliefs, goals, needs, expectations, values, ability) and the agent (alcohol or other drugs) than the characteristics of campus environments that promote or discourage use of controlled substances. Indeed, "there is still a great deal to be learned about university campus culture as it interacts with demographic and personality variables to influence the use and abuse of alcohol" (Brennan et al., 1986b, p. 490).

Purposes of the Paper

The purpose of this paper is twofold: (1) to summarize what is known about the influence of collegiate environments on college student use of alcohol; and (2) to suggest how campus policies and practices can be modified to create environmental conditions that have a positive, health-enhancing influence on college student behavior. The phrase "health-enhancing environments" is used throughout the paper to connote a campus setting in which the institution's philosophy, culture, physical spaces, policies, and practices coupled with appropriate modeling by faculty, staff and students foster responsible behavior on the part of students with regard to alcohol and other drugs. The general attributes of a health-enhancing campus environment await empirical validation; some of these characteristics are inferred from the Kuh et al. (1991) study of colleges and universities where both the campus environment broadly conceptualized and students often exhibit many properties consistent with this view (see Appendix A).

Most of the investigations into the influence of collegiate environments on behavior has focused on alcohol use; relatively few studies looked at the use of other drugs. As a result this paper emphasizes what is known about college environments and alcohol use with only occasional references to other drug use.

The presentation is divided into four sections. First, several conceptions of the college environment are discussed. Because behavior is a function of the interaction between the environment and the person (Lewin, 1936), the characteristics of college students who use alcohol are succinctly summarized. Then, the literature on environmental influences on college student alcohol use is examined using a four-domain framework. Finally, conclusions and recommendations for institutional policies and practices as well as areas that require additional research are presented.

Caveats. Most of the research cited in this paper was conducted at residential campuses that attract predominantly traditional-age (18-23 year) students. Hence, considerable caution must be exercised when applying this information to students over 23 years of age or to urban or community college settings where the majority of students are older, live off campus, and attend school part time. The primary environments that influence the drinking or health enhancing behavior of older, commuting and part-time students are more likely to be the home, family, workplace, and church, not the campus. Finally, much of the research is somewhat dated. Recent anecdotal information and unpublished institutional research reports suggest, for example, that the drinking behavior of women may not differ as much from men as the literature implies.

II. The College Environment

A core assumption of ecological psychology is that people both shape their environment and are shaped by it (Banning, 1975; Barker, 1963; Kaiser, 1972). Collegiate environments, however, are not monolithic; many sub-environments exist on a campus and must be identified and studied independently as well as in relation to each other. Social learning theory (Bandura, 1977) suggests that people vary their behavior depending upon the social and physical environments and varied reinforcement consequences for particular behaviors (Moos, 1976). Complex interrelationships exist among physical, behavioral and temporal properties and produce consistent patterns of behavior within groups of people (Barker, 1968). That is, the same individuals behave differently in certain situations because environmental stimuli consistently elicit and reinforce certain behaviors. For example, the actions of people from Western cultures is quite predictable in churches, playgrounds, gymnasiums, and museums (Rapoport, 1982). In this sense, "a

person does not (primarily) act upon the world, the world acts upon him (or her)" (Conyne, 1975).

An inverse relationship exists between the number of people in a behavior setting and the frequency and intensity of opportunities or "forces that impinge upon these people" (Walsh, 1978, p. 7). In underpopulated settings, "people tend to be busier, more vigorous, more versatile, and more involved" (Walsh, 1978, p. 7) because there are more opportunities to interact and perform functions that are necessary to the well-being of oneself and the group.

Subcultures are interpersonal environments consisting of all people with whom a person is in some sort of enduring contact (Bolton & Kammeyer, 1972). Depending on certain factors (e.g., size of the group, similarity of values--Newcomb, 1962), subcultures may significantly influence the behavior of their members (Feldman & Newcomb, 1969); the more time spent with subculture members, the more likely one will behave in ways consistent with the group's understanding and perception of the environment. To determine the influence of subcultures, three variables must be considered: frequency of interaction, intensity of attraction, and content of the activities in which the group engages (Walsh, 1973).

This brief introduction to the relationship between the environment and behavior suggests that collegiate environments can be described in various ways: physical properties such as the size and location of campus facilities and the use of open space (Gerber, 1989); the ambience created by the behavior and personalities of students (Astin & Holland, 1961); the perceptions of students (Pace, 1984), the environmental "press" (Stern, 1970) or norms and expectations established by dominant student groups (Clark & Trow, 1966) or faculty groups; and the cultural elements of campus life made

up of patterns of norms and values, practices, beliefs, and assumptions which guide the behavior of individuals and groups (Kuh & Whitt, 1988). In fact, numerous instruments have been developed to measure some of these environmental properties such as the Environmental Assessment Technique (Astin & Holland, 1961), the College Student Experience Questionnaire (Pace, 1987), The College and University Environment Scales (Pace, 1969), The College Characteristics Index (Pace & Stern, 1958), and the Involving College Audit Protocol (Kuh, Schuh, Whitt, Andreas, Lyons, Strange, Krehbiel & MacKay, 1991). See Baird (1988) for a description of most of these and other environmental assessment instruments.

A sensible conceptual approach is to view the environment as having important objective, physical characteristics as well as important subjectively perceived and experienced qualities. In this paper, the campus environment includes all the conditions and influences, such as physical, chemical, biological, social and cultural stimuli, that affect the growth and development of living things (Western Interstate Commission for Higher Education, 1973). For example, at a fraternity party, the environment would include the characteristics of the physical setting (e.g., size of party room, lighting, music and such other stimuli as presence of drinking mugs and whiskey bottles), the number of people present and their aggregated expectations, perceptions and attitudes toward personal responsibility, drinking and health, local and state ordinances and campus policies and regulations, and the availability and type of beverages and other consumables (e.g., food). Hence, student behavior, including alcohol use and other drug use, is a function of the mutually shaping interactions between individuals and the various sub-environments of a college comprised of physical spaces, policies, and people (Huebner, 1979). Because information about both people and environments is necessary to understand behavior, the characteristics of

college students who are heavy alcohol users are summarized before considering what the literature says about the environmental influences on alcohol use.

III. Characteristics of College Student Drinkers

"Drinking occurs in many forms, meets a variety of individual and group needs, and is accompanied by a variety of attitudes" (Straus & Bacon, 1953, p. 199). Thus, any sweeping generalization about drinking among college students is likely to fallacious. For example, many college students do not abuse alcohol; a small but important minority abstain. In addition, excessive drinking in college does not always lead to problem drinking in the future (Brennan, Walfish & AuBuchon, 1986a); alcohol use becomes problematic when negative consequences accrue such as poor academic performance, debilitating health or injury, property damage, and altercations with peers or authorities (Moos, 1979). Alcohol use may be a function primarily of the situational stresses inherent in the academic environment, maturational processes (e.g., impulse expression common to adolescents), or the pervasive "college drinking ethic" which is, as we shall see, reinforced by various aspects of collegiate life such as institutional traditions, social events and campus mores.

Berkowitz and Perkins (1987a) grouped the reasons students drink into three categories: (a) to enhance sociability or social interaction; (b) to escape or ameliorate negative emotions such as stress; and (c) simply to get drunk or alter one's consciousness. Moos (1979) identified four sets of factors related to student drinking: (a) lack of commitment to conventional values, (b) participation in informal social activities, (c) stress (such as alienation and physical symptoms), and (d) contextual (high aggregate drinking levels) and social-environmental (relationship and traditional

social orientation) conditions.

The heaviest, most frequent, and most problematic drinking in college occurs among males (Berkowitz & Perkins, 1987a), whites, and Catholics and Protestants; however, involvement in religious activities seems to be associated with lower use of alcohol (Perkins, 1985, 1987) and other drugs (R. Svendsen, January 16, 1991). Heavy drinkers also tend to have parents and friends who drink heavily (Brennan, Walfish & AuBuchon, 1986b), frequently go to parties and bars (Kraft, 1979a, 1988), and are involved with a traditional social group, such as a fraternity, which engages in frequent formal and informal social activities. Heavy drinkers also are more likely to drop out and tend to perform less well academically. Although the relationship between socioeconomic status and drinking is unclear, students from affluent backgrounds seem to consume more and drink more frequently but not necessarily with more problems (Brennan et al., 1986b).

Oetting and Beauvais (1986) found six psychosocial characteristics associated with adolescent drug use: (a) social structure including the age, sex, and family structure, (b) socialization links such as success in school and peer sanctions against or encouragement to use drugs, (c) psychological traits such as self-confidence, shyness, and anxiety, (d) attitudes and beliefs such as belief in drug dangers and expectations for the future, (e) rationales for using drugs such as boredom, anger and loneliness, and (f) behaviors such as actual drug use and the contexts in which deviant behaviors occur. "Problem drinkers" express greater needs for autonomy, change and aggression (Williams, 1967). Those who drink more alcohol during a "party" situation often tend to be more impulsive, gregarious, and non-conforming and less cautious than their counterparts (Brennan et al., 1986a).

The presence of friends who drink heavily seem to influence men more

than women (Brennan et al., 1986a). Men sometimes to moderate their consumption over time, as their frequency of alcohol use increases while the amount consumed per drinking event decreases. Women tend to perceive social pressure to limit the negative consequences of drinking (Moos, Moos & Kulik, 1977). Because the female heavy drinker may be more likely to drink for escapist[2] or rebellious reasons, she may be more deviant in some respects than the male heavy drinker (Moos, 1979). However, it also is possible that gender-related norms simply encourage women to confine abusive drinking to private settings or to underreport negative consequences--possibilities that have not been adequately investigated (Berkowitz & Perkins, 1987b).

In summary, of the two major influences on the hazardous use of alcohol by college students, family and peers, peer influence is stronger (Brennan et al., 1986b). Indeed, Oetting and Beauvais (1986) reported that 95% of the variance in drug use can be accounted for by the influence of peers.

IV. What the Literature Says About Environmental Influences on College Student Use of Alcohol

To facilitate an examination of the literature on college environments and alcohol use, a conceptual framework was needed to collate, analyze and synthesize the findings. The framework had to be broad enough to accommodate research on the individual characteristics of alcohol users summarized in the previous section as well as an ecological perspective on campus environments. Finally, the framework also should allow comparisons between health-enhancing campus environments and those where hazardous use of alcohol is normative.

The framework developed for this paper includes four domains:

1. Physical properties of the campus such as the institution's size, location, facilities, open spaces, and other permanent attributes;

2. Organizational properties of the campus such as administrative structures and processes, residential groupings, policies and practices to

guide student behavior and regulate functions at which alcohol may be present, and activities designed to shape student attitudes, knowledge and behavior related to health enhancement and personal responsiblity;

3. Social-psychological properties of the campus such as aggregated characteristics, attitudes and perceptions (e.g., peer pressure, stress produced by a competitive academic environmental press--Baird, 1988) of students, faculty, staff and others (e.g., alumni); and

4. Cultural properties such as assumptions, values and artifacts (e.g., traditions, rituals, language) that shape behavior and create a campus climate wherein meaning and values are attached to events, activities and behavior of members of the institution (Kuh & Whitt, 1988).

These domains are not mutally exclusive; variables from one domain also may be manifested in one or more other domains. For example, certain cultural properties, such as traditions, may interact with social-psychological properties, such as peer pressure. In addition, the external environment, while not a separate category in the framework, shapes in myriad ways college student attitudes and behavior. Changes in state law and ordinances (Gonzalez, 1990) and customs of ethnic groups that populate the area in which a college is located shape student attitudes and behavior (Kuh & Whitt, 1988). Failure to acknowledge the influence of regional cultural values, norms and socioeconomic realities while expecting students to exhibit responsible, health-enhancing behavior is, under certain circumstances, not unlike "blaming the victim" (Perry & Jessor, 1985, p. 183).

Physical Properties of Environments

Weather. Weather influences behavior but not always in predictable ways. Heat, humidity, and dramatic changes in weather patterns (e.g., rainy periods to sunshine) and seasons (e.g., cold winter days to balmy spring

temperatures) produce different kinds of responses (Moos, 1976).

Physical Spaces. The qualities of the physical environment that seem to have predictable influences on behavior are the amount and arrangement of space (Griffin, 1990). The design and location of buildings facilitate or inhibit social interaction and the development of a cohesive interpersonal climate (Myrick & Marx, 1968). In densely populated areas, such as high-rise residence halls, indicators of social pathology, deviant behavior, and isolation and frustration tend to be higher; these factors are often associated with hazardous use of alcohol (Moos, 1976, 1979). In general, the more organized and neat the appearance (Mehrabian & Russell, 1974) and the less crowded, the lower the level of stress (Ahrentzen, Jue, Skorpanish & Evans, 1982) and one might speculate a reduced risk of hazardous use of alcohol. Interpersonal judgments are sometimes affected by the characteristics of the room in which judgments take place; that is, judgments of people are more negative in unsightly physical environments. Compared with males in large uncrowded rooms, the behavior of men in small crowded rooms is more competitive and less pleasant and friendly. Under similar circumstances, however, women tend to be cooperative, perceive their experience as pleasant, and find other people more likable and friendlier (Griffin, 1990).

Visual stimuli, such as the low lights of a cocktail lounge and personalized mugs and whiskey bottles, promote consumption (Miller, Hersen, Eisler, Epstein & Wooten, 1974; Strickler, Dobbs & Maxwell, 1979). Colors also are associated with certain psychological effects, such as arousal (Rapoport, 1982). Mehrabian and Russell (1974) found that pleasure and physical activity are enhanced by brightness (especially with warm colors) and contrast or variability of color usage; the pleasurable scale of colors ranges from cool to hot--blue, green, purple, red, and yellow respectively.

Schuh (1980) recommended using dramatic color patterns in residences rather than drab colors. This information suggests that the more comfortable the physical settings of residence halls and other places frequented by students (e.g., union, library, recreational facilities), the less likely it is for pathological behavior to be manifested. Whether the crowding phenomenon and such physical characteristics of the environment as color of room are related to hazardous use of alcohol is not known.

Size. People feel more secure, interested and satisfied in environments that emphasize involvement, affiliation and support (Moos, 1979; Wicker, 1979). The greater the number of students on a campus, in a residence hall or in a classroom, the more disconnected they tend to be from each other--and from faculty and staff. As a university grows larger, functions become more differentiated, organizational complexity increases, and morale suffers (Clark & Trow, 1966). The proliferation of courses resulting from the increasing specialization of knowledge has fragmented the curriculum which further isolates departments and faculty from each other and from students (Clark, 1989). Large classes make it difficult for students to get to know the instructors (and vice-versa) reducing opportunities for students to deal with faculty as individuals. Moreover, many thousands of students make it difficult for an institution to identify and clearly, consistently express its values and a coherent philosophy with regard to matters of educational and social importance such as alcohol and other drug use (Kuh et al., 1991).

Off-campus Environments. Institutions may be able to create a physical environment that promotes satisfaction and feelings of well-being which are--as will be demonstrated later--precursors to responsible, health-enhancing behaviors. However, "one block away off campus there are all the bars with three-for-one drinks every day and quarter beer nights" (Connell, 1985, p.

47). When colleges and universities with large numbers of traditional-age students living on or near the campus are located in semi-isolated environments--especially in rural areas--few alternative activities to alcohol are available in the surrounding community to compete for students time and energy (Kraft, 1979a). At institutions with a substantial number of commuting students, students spend far more time off campus than on. Hence at these types of institutions, issues related to alcohol use become as much a concern and responsibility of the surrounding community as the institution.

Organizational Properties

Governmental Policies. In theory, the change in the legal drinking age from 18 or 19 to 21 should have reduced the availability of alcohol for many college students. Gonzalez (1990) discovered that, in spite of changes in state law as well as campus policy, alcohol consumption and alcohol-related problems did not significantly decrease for either underage or legal age students between 1983 and 1985. In fact, female students reported **more** alcohol-related problems (Gonzalez, 1990). In another study, an increase in purchase age was associated with a decrease in campus incidents of disruption and disorderly behavior, criminal mischief, vandalism, and noise problems (Hayes-Sugarman, 1989). However, these same negative behaviors increased in the surrounding community suggesting that a higher drinking age coupled with stricter enforcement do not necessarily discourage students from drinking but rather forces them to drink off campus.

It is too early to determine what impact the Drug Free Schools and Campuses Final Regulations will have on the use of alcohol and other drugs. Based on the findings from Hayes-Sugarman (1989), one might speculate that any decrease in campus drinking activity and its consequences may be reflected in an increase of similar actions and consequences off the campus.

Campus Policies and Practices. According to Gadaleto and Anderson (1986), the percentage of colleges and universities that permitted alcohol consumption on campus did not change between 1979 (77%) and 1985 (78%). Nor were differences found in the percentages of institutions offering undergraduate academic courses dealing specifically with alcohol and drug use (Gadaleto & Anderson, 1986). However, other policies have changed. For example, the percentage of institutions that require prior registration of events involving alcohol has increased appreciably. In 1985, 86% of institutions surveyed required that alternative non-alcoholic beverages be available at public events where alcohol was present, up from 54% in 1979; also the requirement to have food available at such events increased from 24% in 1979 to 71% in 1985. Fewer institutions permitted consumption of beer in residence hall hallways. In addition, more stringent policies have been developed with regard to advertising events where alcohol will be present and the removal of bars from student residences (Creeden, 1990). And, as widely reported (Fischer, 1987), there has been a significant increase in the percentage of campuses with alcohol education and prevention programs stimulated in part by funding from governmental agencies such as the Fund for the Improvement of Postsecondary Education.

Residential Groupings. Living in campus residences or with peers in apartments reduces family influences on drinking behavior but increases the influence of peers and other aspects of the collegiate culture. In residence halls, drinking usually occurs in private rooms by small groups of friends or roommates, seldom alone (Kraft, 1979a). In general, members of sororities and fraternities tend to drink more, consume more alcohol per occasion, and are more adversely affected in terms of their academic performance by alcohol consumption than their non-Greek counterparts (Brennan et al, 1986b; Globetti, Stem, Marasco & Haworth-Hoeppner, 1988; Klein, 1989; Merricks,

1986; Mills & McCarty, 1983). For the sake of balance, fraternity and sorority members reflect a wide range of behavior with respect to the amount of alcohol consumed and awareness of hazards associated with inappropriate alcohol use (Goodwin, 1989). That is, not all fraternity and sorority members are heavy or hazardous users of alcohol.

In environments that are relatively homogeneous in certain respects (e.g., dating, alcohol consumption), incongruent students tend to change in the direction of the majority. Those initially in the majority maintain or further accentuate their attitudes and behaviors. For example, students who enter single-sex living groups in which other students consume more alcohol increased their drinking beyond what would be expected from their initial drinking levels (Moos, 1979).

As with fraternities and sororities, the environments of high alcohol consuming, single-sex living units are often characterized by involvement in formal and informal social activities, such as dating and partying. Such settings encourage social interaction and impulse expression and tend to discourage intellectual discourse and academic achievement. A heterogeneous unit (i.e., abstainers, moderate drinkers, and heavy drinkers living together) has more diverse, mediating influences and provides students with a wider choice of friends and role models. "Students are more likely to find other students with similar attitudes and values and less likely to experience consistent pressure to change" (Moos, 1979, p. 252).

The attitudes of students in co-educational housing units tend to be characterized by relative non-conformity, or independence and indifference toward dating and studying, and a greater concern for creativity, personal feelings, and extracurricular and intellectual matters (Moos, 1979). When men and women are housed together, more moderate drinking norms often emerge

perhaps because there is less emphasis on dating and partying which results in fewer opportunities and less social pressure to drink and more freedom to make independent judgments.

Expectations. Cook (1987) explored whether students' expectations for their residence hall environment were related to drinking behavior. The University Residences Environment Scale (URES) (Moos & Gerst, 1974) was used to assess the social climate of the residence hall floor. Instrumentation included two forms of the URES, the ideal form in which students indicate what their floor ideally should be like and the real form in which students indicate what their floor actually is like. Also included were questions about alcohol problems and Jessor's (1975) quantity-frequency index which converts consumption of different alcoholic beverages into a standard measure of alcohol consumption. These instruments were administered twice, at the beginning and end of the fall semester. Alcohol consumption decreased from a daily average of 0.73 to 0.55 ounces but was not related to desired fit; residents who rated their floors high on the involvement subscale were more likely to increase their consumption during the semester. Alcohol-related problems were independent of student perceptions of the environment. Surprisingly, the higher the congruence between preferred and perceived support on the emotional support scale, the greater the likelihood of student-reported problems with alcohol (Cook, 1987).

Residence Hall Staff. Berkowitz and Perkins (1986b) found that alcohol consumption by resident assistants was similar to that of the "average" student. However, RAs were less likely to drink to excess or to abstain. Because RAs are just as likely as other students to underestimate the degree to which students drink (e.g., perceive consumption to be more moderate than is actually the case), they help perpetuate myths and misperceptions regarding alcohol use. Whether RAs are effective role models depends in part

on how effective role modeling is defined. For example, in some institutionl contexts, RAs might be expected to drink responsibly (i.e., engage in alcohol use with constructive limits on behavior and consequences of behavior) and more conservatively (i.e., less often and in smaller amounts). In other settings, abstinence might be expected.

Involvement in Campus Life. Some research suggests that when students are involved in campus activities they drink less (Goodwin, 1989, in press; Sherry & Stolberg, 1987). Others report that drinking is common among students involved in such activities as student government and athletics (Astin, 1977). For example, Brennan et al. (1986b) found that although participation in a greater number of extracurricular activities was not related to quantity or frequency of alcohol consumption, frequency of intoxication was positively related. A key factor is the nature of the activity in which a student becomes involved; that is, if the activity is compatible with the institution's educational mission and purposes (Kuh et al., 1991), alcohol use is less likely to reach hazardous levels. This is a point to which we will return shortly.

Social-psychological Properties

Advertising. According to Atkin, Hocking and Block (1984), teenagers who say they have seen more television and magazine advertisements for beer, wine, and liquor generally drink more or expect that they will begin drinking. Atkin, Neuendorf and McDermott (1983) concluded that while advertising does not necessarily promote drinking, it seems to encourage an accepting attitude toward heavy or hazardous consumption. Hence, repeated exposure to alcohol advertising may militate against the effectiveness of alcohol education campaigns (Wotring, Heald, Carpenter & Schmeling, 1979).

Social Context of Drinking. Women tend to drink at co-ed social occasions. Men use alcohol in a wider range of settings and activities--outdoors and at athletic events (contexts often associated with heavy drinking)--as well as alone, in small groups of other men, and in mixed groups (Engs & Hanson, 1987).

People who frequent settings (e.g., drinking establishments, fraternity parties) where alcohol is present feel an obligation to drink; the longer one stays the greater the obligation (Room, 1972). The amount of time spent in such a setting and the number of people in a group who are drinking together are positively related to the amount consumed (Cutler & Storm, 1975); drinks are often ordered in rounds and the number of rounds ordered is often a function of the number of people in the group (i.e., everyone has to order or buy at least one round). This practice increases the number of drinks consumed because of the obligation to reciprocate the purchase is inherent in the setting, at least among men (Clark, 1979). Also, fast drinkers tend to influence the consumption of slow drinkers (Skog, 1979) using a repertoire of techniques such as toasting rituals, drinking games, and ordering drinks in complete rounds which challenges slow drinkers to finish their drinks so another round can be ordered.

Whether an individual student can function effectively in settings where alcohol is present depends on the role demands, supports, and stresses in the immediate situation and support available from other people or reference groups. The modeling effect of peers is causally related to increased drinking (Brennan et al., 1986b; Miller et al., 1974), particularly for those students whose "peer clusters" (a tight, cohesive subset of peer group members--Oetting & Beauvais, 1986) promote heavy use of alcohol. For example, it is very important for first and second year traditional-age students to be accepted by their peers (Chickering, 1969). Many students

lack the self-confidence and mature judgment to make appropriate decisions when such conflicts arise as requesting a non-alcoholic beverage at a party even if they prefer such a beverage. Hence, using alcohol in public settings and activities often is an expression of need for peer approval and social acceptance (Kraft, 1979a; Oetting & Beauvais, 1986). This is particularly problematic for women because the location of most social events where alcohol is present tends to be male residences (e.g., residence halls, apartments, fraternity houses) which subjects women to male-dominated social norms (L. Upcraft, personal communication, September 11, 1990).

Gender Roles. Traditional male and female role expectations may influence drinking behavior in four possible ways: (a) by providing differential opportunities; (b) by creating normative pressures to drink or abstain; (c) by creating the perception of a desire to drink; and (d) by promoting uses of drinking that are symbolic (Wilsnack & Wilsnack, 1978). Moos (1979) speculated that men tend to be encouraged to drink and misbehave while women are discouraged to become intoxicated. Women in achievement-oriented settings in which social activities are deemphasized tend to increase their alcohol consumption more than expected; this suggests that they may be under greater stress in settings with high academic demands perhaps because of an erroneous belief that intellectual prowess and academic success may lead to a loss of popularity and femininity (Horner, 1972). The net effect of environmental influences may be stronger for women than men because women tend to be more interpersonally-oriented in group settings (i.e., prefer group harmony and chohesion) and are socialized to be less assertive than most men (Eagly, 1978; Gilligan, 1982). Hence, women are more likely to accommodate to group norms and be less willing than men to make known their personal viewpoints and values in group situations.

Environmental Press. Astin (1968) empirically estimated the average level of drinking across 245 institutions. Above average levels of drinking were more common at colleges and universities that emphasized competition, where students were argumentative and aggressive, where the atmosphere was liberal and informal, and students were considered "snobbish." Below average levels of consumption were more characteristic of colleges described as cohesive and having high levels of involvement in classes, and where the administration adopted strict rules against unlawful drinking. Also, drinking was found to be more common at selective and affluent colleges and lower at institutions where a sense of community was stronger and norms for appropriate behavior were clearer (Astin, 1968, 1977).

Institutional Bonding. Cherry (1987) proposed that social bonds develop between students and their college not unlike those of parent-child bonds.[3] Cherry was able to differentiate abstainers from light to moderate alcohol users and heavy users on three dimensions of bond theory: attachment, commitment, and belief. The most powerful predictors were students' perception of what was considered responsible drinking in their college community, peers as role models, religious commitments, and the influence of their parents. Students with strong bonds to their college drank much less than did students with weak or broken bonds. Although involvement in the types of college activities that best facilitated bonding was not identified by Cherry (1987), one might speculate that the more students feel they are full members of the college community and are engaged in educationally purposeful actitivities (Kuh et al., 1991), the less likely they will abuse alcohol and other drugs (Cherry, 1987). That is, when students "bond" with others who are engaged in certain activities (i.e., those compatible with the institution's educational purposes such as voluntarism), they are less likely to drink heavily than those who are not involved in such activities or those

who identify with groups that emphasize social activities over intellectual pursuits (e.g., fraternities). Appendix A describes collegiate environments in which students are actively engaged in educationally-purposeful activities that facilitate bonding.

Cultural Properties

"The clearly emergent view of what is required to make a significant difference in reducing alchohol and other drug use is that the campus culture must be addressed" (Roberts, in press). Culture can be found in virtually every aspect of group life--language, normative behavior, symbols, ceremonies, stories, rituals and traditions, values, and basic assumptions and beliefs about human nature and the physical world (Kuh & Whitt, 1988; Schein, 1985). To examine the influence of culture on behavior, four cultural layers must be considered: (a) the external environment, (b) the institution, (c) subcultures, and (d) individual actors (Kuh & Whitt, 1988). The properties of culture imbedded in these layers are complicated and mutually shaping; hence, cultural properties from one layer (e.g., the external environment) shape properties in other layers (e.g., institution traditions or individual behavior) (Kuh & Whitt, 1988).

The External Environment. "If we are interested in understanding the institution, we must identify and appreciate how the external environment shapes the institution" (Sanford, 1962, p. 73). Alcohol use has been promoted for many centuries. The ancient Greeks and Egyptians worshipped gods of wine; the Pilgrims brought beer on the Mayflower (Whelan, 1988). The image of the rough riding, hard drinking cowboy in the wild West portrayed on television and films has some basis in fact. Between 1800 and 1850, the annual per capita consumption of distilled spirits in the United States was almost five gallons (Straus & Bacon, 1953). This amount is startling given

that few in those years were moderate drinkers and a large proportion were abstainers; hence most who did imbibe were heavy drinkers. The influence of this legacy of alcohol use is deeply imbedded in the American psyche (Whelan, 1988).

In the United States today, alcohol advertisements seem to be everywhere, including the televised NCAA Final Four basketball tournament. One of the things American troops said they missed most after their arrival in Saudi Arabia in the summer of 1990 was cold beer. Recall that about 90% of the population uses alcohol. In addition, more than two thirds use nicotine products and more than half report at least one-time use of marijuana (National Institute on Drug Abuse, 1990). Abuse of crack cocaine, amphetamines, tranquilizers and other substances has reached epidemic proportions. Moreover, millions of citizens are addicted to food caffeine, gambling, sex, work, religion, and relationships. Taken together, these data led Schaef (1987) to conclude that American society reflects many of the same addictions found in individuals. The characteristics often associated with addicts and alcoholics include denial, dishonesty, control, self-centeredness and rigidity. Using a hologram metaphor, Schaef and Fassel (1988) posited that these behaviors also characterize many organizations (i.e., the characteristics of an addictive society can be seen in all parts of the whole--at the level of an individual addict, an organization or a society).

It can be argued that many colleges and universities also reflect characteristics of addictive systems: denial--institutions are at best recalcitrant to publically admit that alcohol on campus is a problem and fail to discover the alcohol and drug use patterns of their students; control--institutions develop new policies and/or rely on state law for regulation; self-centeredness--institutions react defensively to criticism of their practices as though such criticism was an assault on self; and rigidity--

institutions are inflexible, highly resistant to change. Viewed from the addictive society and system perspectives, the campus culture is but a mirror that reflects societal values and practices related to addictive substances and processes. In this sense, it is not altogether surprising that alcohol use and abuse on campus is widespread.

Institutions, Subcultures, and Individual Actors. Each college or university has a culture which differs from those of other institutions. For example, the language specific to groups at one college campus differs from the language of similar groups on other college campuses (Becker, Geer, Hughes & Strauss, 1961; Louis, 1985). To understand why students think and behave the way they do, we must first describe and appreciate their culture (Van Maanen, 1979), the shared, mutually shaping patterns of beliefs, assumptions, values, norms, practices and artifacts which influence the behavior of students, faculty and others (Kuh & Whitt, 1988).

Alcohol is a symbol of privilege in many collegiate settings, not only among students but also among faculty and alumni (Straus & Bacon, 1953). Consider the role of alcohol in cocktail parties, toasts, and wine and cheese socials that accompany sporting events, commencement ceremonies, traditional student events such as spring-fling weekends (which almost every college seems to have in some form), alumni and alumnae gatherings, and other official institutional functions. An eminent scholar once commented that, "like any civilized man I don't believe any meal should be approached unless preceded by a couple of well-made cocktails" (Madsen, 1984, p. 151).

Alcohol use by students dates back to the 18th and 19th centuries when students banded together to rebell against the punitive, funless environment imposed by presidents and faculty (Horowitz, 1987). Some of this behavior has become institutionalized (e.g., ritualistic consumption, drinking songs,

the popularity of student hang-outs with personalized mugs hung from the ceiling) and persists over time, particularly in certain types of groups such as fraternities which often center their social activities around alchohol (see Leemon, 1972) and other subcultures organized around social themes.

Some alcohol use on college campuses is a product of the views and customary uses of alcohol by founding bodies, such as ethnic and religious groups. For example, some institutions founded by Catholics (e.g., St. John's University in Collegeville, Minnesota) have rathskellars on campus where faculty and students routinely come together. Given the cultural traditions of Wisconsin, the presence of beer in certain campus dining areas at the University of Wisconsin at Madison is understandable. Certain cultures, however, such as the Jewish culture, have strong regulations regarding usage of alcohol (McClellan, 1990; Perkins, 1985) although in some institutions--particularly those in which academic pressure is keen and competitive--environmental pressures may mitigate religious influences and encourage students to turn to alcohol for peer acceptance and release from stress (Perkins, 1985). Certain Mediterranean cultures reflect a non-abusive alcohol use pattern (Fulton & Spooner, 1987). Asian-American and Hispanic students tend not to participate in drinking games which are described below. African-American students tend to drink less than whites; African-American fraternities center social activities around music and dancing. How ethnic cultures and institutional traditions influence hazardous or health-enhancing behavior of students must be better understood.

Aspects of the student culture, such as drinking games, fuel underage and potentially hazardous drinking. For example, a recent survey at Towson State University found that students in folklore classes described over 65 drinking games. A typical student has a repertoire of more than 20 games most of which are acquired in residence hall "room parties." Those who

participate in drinking games consider themselves to be "normal" drinkers; only about 3% thought that participation in drinking games led to alcohol abuse (Douglas, 1987). Such games are by no means a recent phenomenon. Over 2,000 years ago the "symposium" was a social event for Greek men. Along with music, spirited conversation and occasional rowdiness, a good deal of wine was consumed. A "master of drinking" (Symposiarch) was chosen by the throw of dice to maintain order, to determine the correct mixture and amount of wine and water, and to have enough cups available for each participant (Douglas, 1987).

Summary

The college environment has the greatest influence on students who are open to change, concerned about social acceptance, and sensitive and responsive to peer pressure (Feldman & Newcomb, 1969). Some students are able to resist peer pressure and other environmental influences; some collegiate environments are powerful enough to influence almost everyone (Moos, 1979). Many people exhibit alternating tendencies both to conform to and resist environmental influences (Moos, 1979). In general, the effects of the environment on behavior are stronger for women than men (Moos, 1979). In addition, less confident and competent individuals (which includes the

[illegible] college students--Chickering, 1969) are [illegible] influences (Lawton & Nahemow, 1973). When students are in proximity to other students who drink, they are more likely to have friends who drink and, hence, are more likely to drink themselves, provided that the living unit or reference group is cohesive and that there is a demand for conformity in alcohol consumption. As a result, students whose consumption is below the group drinking norm are more likely to increase their drinking beyond what they might expect.

V. Conclusions and Recommendations

Based on this review of the literature of environmental influences on college student alcohol use, six conclusions are warranted. The recommendations that follow from the conclusions are interdependent; that is, to create a campus climate and sub-environments that have a positive influence, a college must address most--if not all--of the recommendations that follow.

A definitive study of campus environments designed to identify institutional characteristics that encourage student responsibility and health-enhancing behavior has not been conducted. However, some characteristics of health-enhancing collegiate settings perhaps can be inferred from the aforementioned College Experiences Study (Appendix A), an investigation of 14 colleges and universities that provide unusually rich out-of-class learning opportunities for their students (Kuh et al., 1991). Several of the conclusions and recommendations for fostering health-enhancing environments are based on policies and practices found at this set of colleges and universities.

Keep in mind that colleges and universities are complicated enterprises, each different from the rest. Only comprehensive, long-term, campus-specific strategies can have the desired impact. Therefore, readers should consider the meaning and implications of the conclusions and recommendations for their particular institutional context.

1. Conclusion: Policies and programs designed to reduce college student alcohol use have been generally ineffective.

"No evidence exists that anything that has been done in the past works in changing attitudes, knowledge or behavior--mainly behavior" (Blane in Ingals, 1984, p. 17). For example, large scale manipulations of contextual

variables, such as enforceable party-planning guidelines, have not been particularly successful (Gonzalez, 1990; Kraft, 1979b). Nor have changes in local and state laws prevented alcohol use or abuse (Gonzalez, 1990; McClellan, 1990). While alcohol education programs have been associated with increases in knowledge about alcohol and its effects, these programs seem to have the greatest impact on those who need them least--students who are able to control their drinking behavior (Williams & Knox, 1987).

Educational initiatives often have salutory effects, however. Campus-wide efforts, such as alcohol awareness week and specific programs and workshops targeted to such at-risk groups as children of alcoholics are important symbolic gestures by which an institution expresses its commitment to creating a health-enhancing campus environment. It is also the case that the evaluations of alcohol education efforts and complementary institutional policies and practices have not been particularly sophisticated; in addition, the transient nature of the population makes it difficult to assess desired change in behavior. Hence what appear to be disappointing findings can be attributed in part to poorly conceived studies (e.g., aggregating all students rather than removing new students from the analysis because they have not received the "treatment(s)" (e.g., education programs). We shall return to this point later.

Recommendations:

(a) Know your students and the environmental conditions on your campus associated with alcohol use.

The amount of structure and assistance students need depends on the characteristics of the students and the institution's mission and philosophy (Kuh et al., 1991). At many colleges and universities, students' educational backgrounds, aspirations, abilities, roles (e.g., student, spouse, parent or

worker), and the stress associated with juggling multiple roles, have changed markedly from those of past students, even the recent past. The impact of the college experience is more likely to be accentuated when faculty and staff acknowledge and respond to differences among individual students and student groups.

On many campuses the pace of student life is hectic and overwhelming, demanding too much time and energy from students and allowing too few opportunities to think about what they are learning. On other campuses, student life can best be described as boring. In both cases (and all those in between) students sometimes respond by organizing activities which are antithetical to the institution's mission (Kuh et al., 1991; Moffatt, 1988). Social life, including parties and alcohol, may become the focus of students' lives as they seek to escape from academic pressures or because they cannot think of anything else to do.

The institutional research office or the student affairs division are likely sources for collection and dissemination of data about students attitudes, needs and activities and the quality of student life. The best source of information about students is students themselves. Most of what is known about students is obtained from self-administered surveys, not in-depth observations of sub-environments and discussions with students. To understand students and the influence of campus environments on student life, more frequent use of qualitative methods (interviews, observations--Kuh, in press b) is necessary.

(b) Adapt "best practices" in designing and implementing alcohol policies, programs and practices to your institution, campus environment and student characteristics.

The physical, organizational, social-psychological and cultural settings of colleges and universities--including policies, practices and the

significance and meaning of behavior--are context-bound. That is, some alcohol policies and practices that seem to work in a given setting may not work or even make sense at another institution (Engs, 1977). Health-enhancing programs and policies must be campus-specific and take into account characteristics of students, location, institutional mission and philosophy and other institutional properties. Attention must be given to individuals, groups, and the larger campus environment when using educational, regulatory and mass media strategies (Kraft, 1984). Other factors that should be addressed in a comprehensive campus alcohol policy, such as guidelines for where alcohol can be used and sold, alternative beverages and food, alternatives to recreational drinking and the regulation of party settings, and cooperative ventures with local alcohol distributors and advertisers are discussed elsewhere (Burns, 1989; Gonzalez, 1990; Klein, 1989; Kraft, 1979b, 1984, 1988, Smith, 1989; Straus & Bacon, 1953).

(c) Acknowledge the significant challenges associated with efforts to successfully "inoculate" a transient population such as college students.

Peer pressure is the most consistent and potent predictor of the frequency and consumption of alcohol (Oetting & Beauvais, 1986; Sherry & Stolberg, 1987) and clearly outweighs the effects of personality, family, social background, and other aspects of the environment (Kandel, 1980; Berkowitz & Perkins, 1987a). Moreover, students tend to turn to friends for advice who are better educated about alcohol use and abuse (Gonzalez, 1990; Klein, 1989). This suggests that "social inoculation" efforts (i.e., the development of responsible attitudes and acquisition of specific skills to resist peer and other environmental influences with regard to alcohol) may serve as a buffer against the occurrence of negative consequences (Botvin, 1983; Hawkins, Lischner, Catalano & Howard, 1986). Hence, more innovative,

comprehensive strategies directed to peer influences on drinking are needed, such as social events that emphasize legal and moderate alcohol use and publicity about the fact that many students already possess moderate, responsible attitudes toward alcohol (Perkins & Berkowitz, 1986a, 1986b).

Because college students are a transient population (30% on residential campuses and perhaps as high as 40% on urban campuses are new to the institution each year), annual, continuing efforts are needed to "inoculate" newcomers as well as to give "booster shots" to returning students. The transient nature of college students also precludes an institution from ever completely controlling the hazardous use of alcohol because some students come to the campus with debilitating drinking habits already formed. Hence, even though it may seem as though little progress has been made from year to year, efforts to provide accurate information and to inform newcomers of institutional expectations regarding alcohol must be made anually with enthusiasm and resolve.

(d) Target resources and prevention interventions to members of at-risk groups and their environments.

Members of some groups are more vulnerable than others to hazardous use of alcohol and other drugs. Men, traditional-age first year students, residents of all-male residence halls, Greek organization members, fraternity house residents, and children of alcoholics are at greatest risk. Interventions should be designed to teach students how to manage their lives more effectively rather than creating artificial "solutions" to problem drinking (e.g., policies that drive students off campus to abuse controlled substances) (Kraft, 1984). Also, attention must be given to primary groups (e.g., room/house mates) with which problem drinkers associate (Morrill, Hurst & Oetting, 1980). To increase the chances for desired impact, interventions must be coordinated with efforts by parents, local schools,

community agencies, churches, and other interested parties as well as campus agencies such as counseling and health services (Kraft, 1984, 1988).

Children of alcoholics and students who choose to abstain from alcohol (e.g., students whose religious beliefs preclude alcohol use) deserve special attention (Strange & Miller, 1978). All too often, the focus is on the abusive drinker and little or no attention and support is given to people who are attempting to withstand considerable peer pressure to conform to drinking norms and the occasional ostracization that results, a point to which we shall return later.

2. Conclusion: A coherent, clearly articulated and consistently expressed philosophy about alcohol and other drug use can encourage responsible, health-enhancing behavior.

A clear, coherent institutional philosophy (i.e., what an institution believes about alcohol and other drug use, health, and the means by which these matters are addressed) that speaks to personal responsiblity and health-enhancing behavior provides direction for students and minimizes confusion and uncertainty about what the institution expects of students. Health-enhancing policies and interventions must be consistent with the mission, values and educational purposes of the institution. Student behavior can then be assessed, and, if necessary, challenged in light of the mission and philosophy.

Recommendations:

(a) Discover, discuss, and modify-if-necessary--the institution's philosophy toward alcohol and other drug use.

Every institution has a philosophy related to health-enhancing behavior. It may not be written; it may be more or less coherent; it may be more or less congruent with the institution's educational purposes. Moreover, the

"official" espoused philosophy may differ from the enacted philosophy. That is, some colleges have strict but essentially ignored policies which create confusion about what the institution's philosophy really is. The philosophy must be discovered and tested against the institution's history, traditions, aspirations, values and assumptions about learning and human development.

(b) All members of the campus community should be familiar with and committed to the institution's philosophy.

Make sure that the institution's philosophy is communicated clearly and consistently in institutional publications, at gatherings of community members, and when welcoming newcomers and returning students, faculty and staff. Socialization activities (e.g., admissions materials, campus tours, orientation events) send powerful messages about what the institution stands for and expects of new (or prospective) students, faculty, and staff. Alumnae/ni and friends of the institution also must be periodically reminded of the institution's philosophy and priorities with regard to health-enhancing behavior and hazardous use of alcohol and other drug use.

(c) Examine what the institution's policies and practices teach students about alcohol and other drug use.

Students learn from what an institution does just as surely as they learn from what institutional policies, faculty and staff say. "If we inquire historically into the causes likely to transform engages into enrages it is not injustice that ranks first, but hypocrisy" (Arendt, 1972, p. 162). What social values does the institution espouse? For what purposes is alcohol used? Is the presence of alcohol at institutionally-sponsored events consistent with the institution's mission and philosophy?

(d) Allocate resources to encourage students to behave in ways that are compatible with the institution's philosophy.

What a college or university values is evident in how, and for what purposes, its resources are allocated. If an institution says it is important for students to acquire responsible, health-enhancing attitudes and behaviors, more than a token portion of its financial and human resources must be directed to those ends.

(e) Assess whether existing substance abuse and health-enhancing programs and services are consistent with the institution's philosophy.

Administrators and faculty can become so involved in the demands of daily events that they do not take time to review whether, or in what ways, their efforts are compatible with their institution's philosophy. An initial step is to identify alcohol and other drug education programs and services that are of questionable utility and suspend them for a year to see if anyone misses them. Use any savings of human or financial resources to concentrate on creating environmental conditions that foster health-enhancing behavior.

(f) Establish or support a campus rathskellar or pub <u>if</u> such a setting is consistent with the institution's history, cultural values and philosophy toward alcohol.

Campus pubs present paradoxes. The very existence of a campus pub seems to say that the institution encourages drinking. But when health-enhancing norms prevail campus pubs or rathskellars can be educative sub-environments and a viable alternative to off-campus drinking which often results in students operating motor vehicles while intoxicated (Kincannon, 1983). When frequented by both faculty members and students, a pub fosters moderation and provides students with what Sanford (1967) described as "integrative experiences" with alcohol;[2] such facilities may even encourage more frequent interactions between faculty and students, a condition associated with achievement, satisfaction and persistence (Kuh, 1981, Tinto, 1987). Whether drinking together by faculty and students is appropriate depends on the law,

the institution's philosophy (Sanford, 1967), and the pub's environment.

For example, a pub's physical and social-pschological environments should encourage conversation and moderation and discourage competitive, hazardous alcohol use associated with, for example, drinking games. Other guiding principles should reflect such "best practices" as availability of mocktails, high protein/low salt snacks, advertising that promotes educational programs and activities instead of hazardous consumption and so on. The facility could be made available only to groups who provide a rationale for their event which is consistent with the educational purposes of the institution. Any time a college becomes a commercial vendor, liability risks are increased. All staff should be trained to recognize and terminate abusive use (Fulton & Spooner, 1987).

3. Conclusion: Institutions that value and expect student responsibility and health-enhancing behavior encourage these behaviors.

Programs and policies designed to reduce hazardous use of alcohol and other drugs, when framed in the rhetoric of the so-called "healthy student community," are often politics masquerading as science (Burns, 1989). That is, "health" is used as a reason for students to obey rules established by university officials or governmental agencies. While this approach to discouraging substance abuse is appealing to some, it does not acknowledge an individual's responsibility for learning how to take care of him or herself (Burns, 1989).

A college or university promotes responsible, health-enhancing behavior by establishing high expectations for student and faculty performance and tells students, from their first contact with the institution, that they will be responsible for their own affairs. When students are welcomed as full members of the institution (the ethic of membership--Kuh et al., 1991), they

are told, in effect, that they are expected to participate in running the institution and maintaining a healthy campus environment.

Recommendations:

(a) Create an environment in which students can be responsible.

In order for students to act responsibly, certain conditions must be present in addition to those enumerated throughout this section: trust, care, and support for health-enhancing activities. Rather than plan and organize student activities, faculty and staff will have more influence when they work with students. Student groups (e.g., residence hall floors, service clubs, adult learner and commuter student organizations, fraternities) should be encouraged to initiate health-enhancing campaigns around specific themes (e.g., smoking, alcohol use) for a designated period, such as a semester. Groups should be acknowledged for their efforts at campus-wide celebratory events (Burns, 1989).

(b) Recognize and take advantage of the power of the small gesture in encouraging and reinforcing student effort devoted to health-enhancing behavior.

There is no substitute for personal contact in encouraging student responsibility and health-enhancing behavior. The confluence of expressions of interest in students' welfare makes them feel known and valued, and encourages them to resist peer pressure and exercise independent judgment. At a time when a sense of community seems to be unraveling on many college campuses, we would do well to remember that, in many ways, a community is made up of the thousands of small gestures that keep people together and communciate appreciation and belonging (Kuh et al., 1991).

(c) Make health-enhancing experiences of students, wherever they occur, a priority on the agenda of institutional leaders.

To ensure that efforts will be continuous and consistent, health-enhancing programs must be endorsed by campus leaders (Kraft, 1984). Moreover, the amount of attention institutional leaders devote to alcohol use and the quality of campus life is a function of the importance they place on those issues. Of course, merely asserting that the quality of campus life is important does not make it so; actions must accompany the words. Concern for health should be evident in the words and deeds of institutional leaders, from everyday encounters to long-range plans. For example, when presidents talk with trustees, alumni, faculty and staff, students, state legislators and the press, student health should be emphasized when appropriate. How does the institution want and expect students to behave? How are those expectations communicated? Why are responsibility and health-enhancing attitudes important? How does the institution help students become responsible? What health-enhancing programs and policies are in place?

(d) Make sure that safety nets and early warning systems for students in difficulty are in place and operating effectively.

An institution does not demonstrate concern for students' welfare when faculty and staff separate themselves from students in order to avoid taking responsibility for them (Burns, 1989). Although students must be expected to exercise responsibility, they must not be abandoned or always allowed to fend for themselves. "Early warning systems" (made up of faculty, staff and students) which identify students with problems and "safety nets" made up of faculty and staff that respond to students in difficulty must be expanded (Kuh et al., 1991).

4. Conclusion: <u>Small, "human scale" environments encourage responsible, health-enhancing behavior.</u>

Too many students feel unattached, that their contributions are

irrelevant (or redundant--a function of large size) or that if they do not take an active role the institution can function effectively without them. In the absence of a sense of community (i.e., shared values, aspirations and a way of knowing), escapist drinking and other threats to health-enhancing behaviors are not uncommon. Moreover, responsible, health-enhancing behavior must be expected from students, faculty, staff and others. Students in particular must understand that they have meaningful roles to play in creating a responsible, healthy campus community and that alcohol and other forms of self-medication are not acceptable ways of dealing with frustration, stress and boredom.

Responsibility and health-enhancing attitudes and behavior are fostered when faculty, staff, and students are familiar, and have frequent contact, with one another. By providing small residences and classes, maintaining effective communication networks, and widely disseminating information, a college or university encourages its members to know each other, a precursor to interacting easily and comfortably and caring for one another.

Recommendations:

(a) Create human scale sub-environments by dividing large facilities into smaller units.

Recall that in underpopulated behavior settings (Barker, 1963), people must actively take part in more activities to accomplish basic tasks (e.g., governance) necessary to the maintenance of the setting (e.g., residence hall) and are required to accept more responsibility; these settings lay a greater "claim" on students because relatively difficult tasks must be performed by each individual. Hence, each person has a greater functional importance to the setting, more responsibility and a greater sense self-identity, all of which enhance self-esteem and integration into the campus community and support the ethic of membership mentioned earlier.

Interventions targeted for at-risk students are not likely to be successful on large campuses or in large residence halls (500 or more students). Large institutions, however, can create "small" sub-environments to compensate for disadvantages of size and to meet the needs of students for interaction and solitude (Kuh et al., 1991).

(b) Focus on ameliorating the sub-environmental conditions associated with hazardous use of alcohol and other drugs.

Dark spaces provide the illusion of anonymity which militates against students taking responsiblility for their own behavior. Moreover, visual and auditory cues and symbols (e.g., music, drinking songs, bottles, beer mugs) suggest that alcohol consumption is appropriate. The assymetry in interpersonal influence-relations accentuates consumption so that the amount consumed becomes positively correlated to group size. In other words, the larger the group the more people drink. Hence, events that are designed to attract large numbers of students (which allows them to be anonymous and irresponsible), such fraternity house parties and keggers on the campus green or elsewhere, should be discouraged.

(c) Housing assignment policies should take into account different attitudes and behaviors related to alcohol and other drug use.

The declining number of traditional age college students in the 1980s encouraged institutions to emphasize retention. Policies and practices designed to insure institutional survival are not always educationally purposeful. For example, placing students with similar interests together increases the prospects for cohesion and compatibility, conditions associated with satisfaction which is linked to retention (Tinto, 1987). Yet in most instances, cohesion also engenders conformity. Of course, compliance with health-enhancing norms is the goal. But for groups that have a social

orientation and deemphasize academic achievement, normative behavior may very well include the hazardous use of alcohol and other drugs (Moos, 1979).

There may be tradeoffs between increasing retention and health-enhancing behavior. Consideration should be given to reducing the size of residences, creating more co-educational housing options (which admittedly place a burden on women), and placing first-year male students in smaller housing units with upperclass students. Particular attention must be given to the dilemma presented by the presence of fraternities and sororities. On the one hand, such anti-intellectual attitudes and behaviors as hazing, sexism, racism, sexual assault, homophobia and alcohol abuse have been associated with Greek letter organizations. On the other hand, such organizations can provide powerful human scale environments, particularly on large university campuses. Whether fraternities and sororities are compatible with an institution's philosophy (e.g., expectations for responsible, health-enhancing behavior) can only be determined on an institution by institution basis (Kuh & Lyons, 1990).

5. Conclusion: Feelings of loyalty and a sense of specialness encourage responsibility and health-enhancing behavior.

Most health-enhancement initiatives tend to emphasize education and information dissemination rather than discovery of systemic norms and other cultural influences that encourage or discourage alcohol and other drug use. People have a tendency to become more like the majority of people in their milieus. This "progressive conformity" (Moos, 1976) raises the possibility that if an institution can create and sustain a culture in which alcohol use is appropriate and health-enhancing attitudes and behaviors are valued, students will adopt those perspectives for themselves and behave accordingly. That is, collegiate cultures that model responsible, conservative usage are

more likely to have an ameliorative influence on the hazardous use of alcohol and other drugs. Hence, the most promising avenue to influencing college student drinking is cultural change. Although it is beyond the scope of this paper to describe culture- shaping strategies,[4] several points warrant consideration when thinking about where to start.

Recommendations:

(a) Discover what is distinctive about the institution's culture with regard to responsible, health-enhancing behavior and celebrate it.

Institutional self-discovery is necessary both to determine what is special about a college or university as well as to create an environment that engenders student responsibility and health-enhancing behavior. An institution's past and present must be revisited--its history, mission, philosophy, and traditions. Institutional histories and anthologies as well as current catalogues and handbooks often provide insights into campus traditions and how these traditions influence student behavior. A key task is to determine what messages these events send to students about individual and collective responsibility and health. Equally useful will be talking with campus historians, institutional heroines and heroes, emeritus faculty and administrators, alumni/ae and students about the guiding values and aspirations of the institution and what these values and aspirations say about responsibility and health-enhancing behavior on the part of students, faculty and others. Does the common language of the institution, especially the terms used to describe health-enhancing behavior, reflect the values espoused in the institution's philosophy? Does the institution's philosophy tolerate unlawful use by ignoring state and local laws?

(b) Discover the cultural properties that seem to encourage irresponsible behavior and substance abuse and develop a strategy to ameliorate these influences.

Whether culture can be intentionally changed is debatable (Kuh & Whitt, 1988). But campus cultures do evolve over time, shaped by external forces and the changing characteristics of students, faculty and staff. One thing is certain: alcohol and drug education staff, counselors and other helping professionals cannot, by themselves, change the campus culture. A commitment from everyone--including institutional leaders (e.g., president, student leaders) is required if the campus culture is to become health-enhancing. The key challenge is to channel peer influence toward the creation of social environments and peer cultures which discourage hazardous use of alcohol and abstinence from other drugs, refer abusers for appropriate treatment, and expect their members to exhibit health-enhancing attitudes and behavior.

(c) Discover how students are influenced by peers, student cultures, and other features of campus life.

A study of student cultures could provide insights into their influence on health-enhancing behavior and hazardous use of alcohol and other drugs. Students' time and energy may be devoted to activities that may or may not have anything to do with the institution's educational purposes or health-enhancing goals. Campus leaders should examine whether opportunities to pursue health-enhancing activities and the ways in which students spend their time are consistent with the institutional mission. With what activities do they fill their lives? How do students decide how to use their time? In what ways do peers and peer cultures affect students' lives and learning? Are students' experiences consistent with the educational purposes of the institution?

An institution should consider whether the potentially damaging, or perhaps negative, effects of competition is related to alcohol use. Students in competitive institutions or academic programs often feel the need for

release from the stress induced by competition. Because other students may be viewed as competitors, constructive social solutions may not develop, but drinking is almost always available as an outlet. It is important to underscore that competition in the context of this discussion is not equated with high academic expectations for students which can exist in the absence of an atmosphere where students view each other as competitors (L. Baird, personal communication, September 6, 1990) as with many of the institutions in the College Experiences Study (Kuh et al., 1991, Appendix A).

(d) Support the establishment of one or more student subcultures that value sobriety, care and concern.

The presence of two or more dominant student cultures is necessary to allow different types of students to find an identity group or niche and to identify with role models whose attitudes, interests and values are more like their own (Clark & Trow, 1966). Every campus has student heroines and heroes who model health-enhancing behavior; make sure that students (and faculty!) know about them and that their contributions are periodically heralded. Moreover, acknowledgement of students who model health-enhancing behavior (e.g., SADD chapters, BACCHUS, living units organized around wellness themes such as Anibal House at Oakland University) sends a powerful message about what the institution considers to be appropriate. Consideration should be given to establishing housing units and other groups organized around care, concern and sobriety.

(e) Challenge the sense of privilege associated with alcohol use on the campus.

Egalitarianism and diversity characterize collegiate environments where the ethics of care and membership operate (Kuh et al., 1991). All institutional policies and practices (not just those specifically related to alcohol and other drug use) should be revisited in order to determine whether

they create artificial distinctions among certain groups of students and are consistent with local and state laws. For example, admissions, financial aids and housing policies sometimes advantage certain groups (e.g., athletes, fraternity members). Treating groups of students differently exacerbates artificial status differences and sends mixed messages about the institution's commitment to equality, individual worth, health, and responsibility. Put simply, under no circumstances should an institution be allowed to become a sanctuary for unlawful use of alcohol by one or more groups.

6. Conclusion: More needs to be learned about environmental influences on college student alcohol and other drug use and successful approaches to fostering drug-free environments.

A good deal is known about certain campus environmental factors (e.g., social-psychological influences such as peer pressure) on normative drinking behavior in small and large group settings. Relatively little is known, however, about the influence of alcohol advertisements, off-campus environments and the physical setting and cultural elements of campus life on alcohol and other drug use. Additional investigations would be fruitful into the human scale properties that shape student use of alcohol, such as crowding, and the efficacy of collaborative efforts with off-campus community agencies.

Recommendations:

(a) Governmental agencies and philanthropic organizations should be asked to support investigations into the influence of environmental properties on the use of alcohol and other drugs.

The Office of Educational Research and Improvement (OERI) and the National Institute on Drug Abuse are likely governmental sponsors of such

At some campuses, the majority of students and faculty exhibit responsible, health-enhancing attitudes and behaviors. It is possible that the characteristics of "health-enhancing" colleges and universities are similar to those found in the College Experiences Study (Kuh et al., 1991) described in Appendix A). The only way to know for certain is to conduct field research at a number of institutions. Multiple institution studies are time-consuming, expensive and require multiple investigators (Whitt & Kuh, in press). Perhaps this is why such a study has not yet been conducted. Among the governmental agencies with an interest in this area, The Fund for the Improvement of Postsecondary Education and OERI are likely sources of support.

Concluding Thoughts

It is not realistic to expect colleges to be alcohol and drug-free. The vast majority of college students have experimented with alcohol and--in many cases--other drugs prior to coming to the campus. Strict enforcement of regulations in an effort to maintain an alcohol-free environment will create ill-will and repress some of the characteristics that make colleges and universities unique instruments for social change, experimentation, and havens for diverse views. Indeed, a recent survey of presidents indicated that more stringent campus life regulations are not likely to have the desired effects (The Carnegie Foundation for the Advancement of Teaching, 1990). When rules and regulations are strictly enforced, deviant behavior may subside on campus only to be expressed off the campus. The history of higher education is replete with examples of how student cultures go underground or off campus to act out rebellious behavior that deviates from campus rules and regulations. Hence, a college or university will not be able to eradicate hazardous use of alcohol and other drugs without

research. Requests for proposals which address some of these questions could be developed for distribution in future funding cycles.

(b) More sophisticated evaluations are needed of the impact of educational programs, campus policies, and federal legislation and regulations.

The transient nature of college students makes it difficult to monitor and document changes in drinking behavior and typically result in the illusion of no demonstrable impact. The consequences of the Drug Free Schools and Communities Act Amendments and Drug Free Schools and Campuses Final Regulations should be carefully recorded on a campus by campus basis to determine if the intended effects are accruing, or if students are moving off campus to act out rebellious rituals including potentially hazardous use of alcohol. Equally important will be to determine whether institutional resources are siphoned away from targeting at risk groups and attempting cultural change in order to meet the letter of the regulations.

(c) Additional research is needed at institutions with substantial numbers of commuting, part time and older learners.

As mentioned earlier, most of what is known about the influence of college environments on alcohol and other drug use is based on studies conducted on residential campuses with predominantly traditional age students. The sub-environments that shape the attitudes and behavior of many of the so-called "non-traditional students" at urban institutions and community colleges are more likely to be off campus (J. Schuh, personal communication, September 11, 1990).

(d) A descriptive study should be undertaken of collegiate environments characterized by responsible, health-enhancing philosophy, culture, policies, practices and faculty, staff and student behavior.

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complementary policies and practices in the external environment (e.g., legislation regulating advertising).

Unfortunately, the idea of helping young, and not-so-young, adults to become responsible drinkers has become an ideological "red herring" among some policy makers. Nonetheless, to aspire to be a community where it is not assumed that everyone drinks is consistent with the purposes of an institution of higher education. And there are examples of sub-communities organized around sobriety, care and concern (e.g., SADD, BACCHUS). But the cultures of far too many colleges do not value sobriety, care and concern. Before students will adopt such values, these values must be reflected in an institution's philosophy--the way it does business--and exhibited by faculty, staff and student leaders and other role models. Such heroes and heroines must work together to create a sense of urgency (Rappaport, 1981) on their campuses so that attention and resources are continuously and consistently focused on promoting responsible, health-enhancing behavior.

End Notes

1

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2

Sanford (1967) categorized three types of drinking practices. Escapist drinking is an irresponsible way to avoid anxiety, unpleasantness and frustration, to relieve boredom, and to rebel from authority. Escapist drinking also may be triggered by impulse expression needs common to the adolescent and young adult years and may lead to hazardous use of alcohol.

Facilitative drinking induces conviviality, lubricates communication, and fosters social interaction. Examples of facilitative drinking are the cocktail party, whether people consume alcohol or not, and a drink with dinner or at an office party. Whether alcohol actually fosters social interaction is not known for certain. Many students simply drink to conform to peer expectations; at worst, drinking under these circumstances may lead to escapist drinking.

Integrative drinking adds meaning and dignity to a culture without being essential to its existence. At ceremonial occasions, alcohol may symbolize an inclusive sense of community and enhance group solidarity; however, alcohol is not a substitute for community in that the foundation of shared experiences on which the community is based exists in the absence of alcohol. Abstinence may be integrative when the practice is grounded in a coherent system of beliefs and actions. However, abstinence also can be a form of escapism when the belief system of a group is threatened by contrary beliefs so that it becomes necessary for a group to rigidly insist upon adherence to its mores and expresses hostility toward groups whose attitudes and practices differ (Sanford, 1967).

3

Social bond theory is a combination of control theory and problem behavior proneness theory (Jessor & Jessor, 1977). Control theory (Hirschi, (1969) is based on the assumption that the quality of the parent-child bond influences the child's participation in deviant activities. In problem-behavior proneness theory, behavior is the outcome of an interaction of the personality and environmental influences.

4

To learn more about culture-shaping strategies, consult one or more of the following: Frost, Moore, Louis, Lundberg and Martin (1985), Kuh (in press c), Morgan (1986), Peterson, Cameron, Mets, Jones and Ethington (1986), and Schein (1985).

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Appendix A

Characteristics of Campus Environments That Foster Responsible, Health-Enhancing Behavior

The purpose of the College Experiences Study was to identify the factors and conditions common to institutions reputed to provide unsusually rich out-of-class learning opportunities for their undergraduate students. Although students at these institutions were not free from alcohol-related problems, hazardous use of alcohol was not a galvanizing issue during the time the study was conducted. The 14 colleges and universities in the study included large residential universities (Iowa State University, Miami University, Stanford University, University of California, Davis), small residential liberal arts colleges (Berea College, Earlham College, Grinnell College, The Evergreen State College), and urban institutions (University of Alabama-Birmingham, University of Louisville, University of North Carolina-Charlotte, Wichita State University). A women's college (Mount Holyoke College) and a historically black college (Xavier University) were also studied. These institutions were identified with the help of 48 people knowledgeable about higher education including scholars such as Alexander Astin, Zelda Gamson, Joseph Katz, Robert Pace and David Riesman, representatives of regional accreditation associations and higher education associations such as AAHE, ACE, CIC and NASPA, and selected college and university presidents and chief student affairs officers. About 1300 individuals (including the president, faculty members and students) were interviewed, many of them two or more times during the 26 campus visits which were two to four days in duration. More information about the research methods and findings are presented in Kuh, Schuh, Whitt, Andreas, Lyons, Strange, Krehbiel and MacKay (1991).

Five of the factors and conditions shared to varying degrees by these colleges warrant consideration: (a) mission and philosophy, (b) human scale environments, (c) campus culture, (d) policies and practices, and (e) student attitudes and behavior. These characteristics work together in different combinations and toward different purposes--depending on the institutional context and mission, expectations for student and faculty behavior, and desired educational purposes and outcomes (Kuh et al., 1991).

Mission and Philosophy

No factor is more powerful in promoting responsible, healthy behavior on the part of students than the institution's mission and philosophy. Often based on religious, ideological, or philosophical beliefs, the mission is, in part, the yardstick by which students, faculty and others determine if their activities and institutional policies and practices are educationally purposeful. An institution's philosophy is made up of assumptions and beliefs about human potential, teaching, and learning. Hence, the philosophy of a college is the **means** (policies, practices, standard operating procedures) through which it enacts its mission--"how we do things here." Although the missions and philosophies of the 14 institutions in the College Experiences Study were diverse, they had four characteristics in common.

First, the institution's mission and philosophy were clearly and consistently articulated. Students, faculty members, and administrators

understood and could describe--in their own words--what the institution was trying to accomplish. Second, the institution had established high, but reasonable, expectations for student behavior supported by ethics of care and membership. How the institution held students accountable for their behavior, and the types of support the institution provided, varied depending on the characteristics of students and the institutional mission. Programs and services were in place to enhance students' chances for academic success, social welfare, and satisfaction.

Institutional values communicated caring and belonging to students. Faculty members, administrators, students, and others assumed that all individuals were persons of worth and dignity. The ethic of membership made it clear that all students--including newcomers--were equal and expected to behave as full members of the community with all the attendant rights and responsibilities--including appropriate behavior related to alcohol.

Campus Culture

There was "something special in the woodwork" at these colleges. This specialness sustained a sense of community and was rooted in the institution's culture and dominant subcultures which fostered responsibility and a sense of ownership among students. Some of the most powerful cultural influences on student behavior included the institution's history, traditions, language, norms, and symbolic actions.

Traditions communciate important institutional values, maintain and renew the community by binding past and present lives with shared meanings and actions, and reinforce expectations for responsible, health-enhancing behavior. Students at The Evergreen State College, for example, described with affection the potlucks, occasions when students and faculty become acquainted. Potlucks were often held in the homes of faculty and provided the initial "glue" for the bonding that characterized student-faculty relations. Such traditions put students into contact with adult role models and made it clear to students what is expected of them in their institutional context.

Institution-specific language ("terms of endearment") was used by students and others to signify full membership in the institution and describe appropriate behavior. Miami University, for example, has an extensive cultural vocabulary--including such phrases as "Mother Miami" and "mother of fraternities"--which connote nurturance and sense of family; the University is a source of life (of the mind) and nourishment (for the spirit), and a sheltering home for all her "children." Similarly, the "Miami Bubble" implies that the campus is a safe place, a protected seat from which to observe, and occasionally experience, the "real" world.

Institutional symbols call attention to important values and elicit feelings of pride and identification with the institution (social bonding--Cherry, 1987) among students. Symbolic action is an effort on the part of groups and individuals (often institutional leaders such as the president and dean of students, as well as students such as student government and fraternity officers) to bring institutional symbols into focus for members of the community, reminding them of the ideals for which they are striving. These cultural elements and more, such as the shaping influences of regional and local cultures, work together to help students create a shared

understanding of how the institution works, what is valued, and how to get things done.

Human-Scale Campus Environments

Human scale properties have both physical and psychological aspects. The physical environment (buildings, signs, traffic patterns, landscape) sends messages about whether people are valued more than things and contribute to physical and psychological comfort. Facilities and grounds at these colleges were well maintained but not overpowering; most buildings were no more than three or four stories above ground; few classrooms--if any--held more than 100 students; few student residences had more than 200 to 300 residents. Indoor and outdoor nooks and crannies encouraged informal, spontaneous interaction; personal spaces could be appropriated so that students could be alone if desired; an ample supply of opportunities were available for students to become meaningfully engaged in the life of the institution such as leadership roles in major-related and social clubs and organizations, recreation, campus jobs, and off-campus work/internships.

The most critical issue regarding campus environments and health-enhancing, responsible student behavior was not institutional size or numbers of students. More important was creating a sense of belonging, a feeling on the part of students that the institution acknowledges the human needs of social and psychological comfort (e.g., small colleges seem larger than they are and large universities seem smaller). At a college that values people, and their health, it is difficult, perhaps impossible, for a student to be anonymous. The prolonged absence or change in disposition of a roommate or floor/house member is usually noted. This is not to say that tragedies do not occur or that debilitating personal behaviors are checked immediately by peer pressure, or that no one ever feels anonymous. However, students tend not to get lost because people are known by sight, and more often than not, by name.

Policies and Practices

Three clusters of policies and practices encouraged responsible, health-enhancing behavior. First, recruitment and socialization practices clearly and consistently articulated the institution's educational purposes, values, and expectations. A concerted effort was made to help newcomers feel welcome while at the same time clearly articulating behavioral expectations. Between the time a prospective student first expressed interest in attending the college and matriculation, the institution described, in plain language, what it valued and was trying to accomplish (Kuh, in press a). Various forms of anticipatory socialization, the process by which newcomers become familiar with the values, attitudes, norms, knowledge and skills needed to be effective in a new role or environment prior to actually entering the setting, were used to teach newcomers what it is like to be a responsible citizen of the campus community. For example, students new to Stanford University received 15 mailings during the summer prior to their matriculation which contain this information.

Second, formal and informal induction activities taught students how to act and included messages about what is expected of students. Orientation programs communicated standards and expectations for academic and social behavior. Through these activities, which were different at each college or

university, the bonding process was initiated between student and institution and student and student.

Finally, institutional policies made students responsible, and held them accountable for, maintaining community standards; these expectations for individual and collective responsibility were clearly and consistently communicated. The degree of structure provided was a function of the institution's mission, philosophy and students' needs and capabilities. For example, students at some institutions (e.g., Berea, Miami, Iowa State) were given considerably more structure than their couterparts elsewhere (e.g., Earlham, Grinnell, Stanford). Xavier University in New Orleans established a "ladder" or set of programs and activities with steps, or rungs, to help students become involved in the campus community, feel supported, and become academically and socially successful. Institutional levelers (a program, policy or practice) established equality among students and mechanisms were in place to encourage development of autonomy while helping students cope with the stress often associated with high expectations for achievement and hazardous use of alcohol. For example, informal networks of faculty, staff and students have developed over time and work together in times of crisis to assist students in need.

Students

College students are diverse in many ways--educational aspirations, socioeconomic background, age, ability, racial and ethnic heritage, and their experience with alcohol. Four themes characterized students at these institutions. First, students knew (or thought they knew) how the institution worked and what was expected of them to be successful in that context. Through the anticipatory socialization and formal and informal induction experiences described earlier, students received fairly clear and consistent messages about behaviors that will be successful and reinforced by the student cultures and by faculty and staff.

Second, most students took seriously the institution's expectations that they were responsible for themselves, for each other, and for their living and learning environments. In some instances, the institution's history and traditions sent strong messages about students taking care of each other. For example, the first president of Miami University, Robert Hamilton Bishop, said that students would have to "teach each other" because the institution's enrollment increased ten-fold from its first year to the next while the number of faculty remained constant. Thus, from the earliest days, students were expected to make important contributions to the life of the Miami community and to learn from one another. As mentioned earlier, some institutions, such as Iowa State and Xavier, provided specific guidelines to which students must adhere, particularly in the freshman year. Other institutions, such as Grinnell College and Stanford University, allow students to determine what behaviors are acceptable and appropriate:

> "At first it bothered me [that the institution did not monitor alcohol or marijuana use]. But I realized that this is really important--that you are allowed to be responsible for your own behavior, unless it gets to be a serious problem. Then if a friend goes to an RA, an RA might start talking to that person, or suggest that they go to a mental health center . . ." (Grinnell student)

Third, students know that their peers influence them in ways that faculty members or classes never could. Words such as intelligent, responsible, and supportive were used by students to describe their peers: For example, a Mount Holyoke student said: "I'm a lot more conscious of so many things because everything was really challenged. I had to defend the way I thought to other students so that made me think."

Finally, most student subcultures promoted student behavior that was responsible and health-enhancing. Many of the colleges and universities in this study were advantaged by having two or more student subcultures that promoted activities that were--for the most part--congruent with the institution's philosophy and educational purposes. Western College and the Student Foundation at Miami, the Greek organizations and residence hall "houses" at Iowa State, and the traditional-age student and adult student organizations at Wichita State and the University of Louisville all had heroes and heroines with which different types of students on those campuses could identify. Equally important, these groups and others perpetuated rituals and traditions that provided a sense of continuity and belonging for members of the community.

None of the small residential institutions in the College Experiences Study had nationally-affiliated fraternities and sororities, groups that have been criticized for perpetuating anti-intellectual behaviors and alcohol-related traditions. As was demonstrated in the review of the literature, the presence of Greek organizations increases the chances of hazardous use of alcohol. The larger institutions did have Greek systems; at some, such as Stanford, the growth of fraternities and sororities has been actively discouraged. More important for the purposes of this paper, however, was that fraternities and sororities were not the only dominant student subcultures at the institutions in this study; other subcultures and reference groups offered viable, alternative role models whose values were compatible with the institution's educational purposes (Kuh & Lyons, 1990).

Summary

Collegiate environments that foster responsible, health-enhancing behavior have: a clear, coherent mission and philosophy that communicate high but reasonable challenges for students buttressed by ethics of care and membership; human scale settings in which anonymity is discouraged and numerous opportunities are available to exercise responsibility and participate fully in the life of the institution; a complicated web of cultural artifacts (history, myths, sagas, heroes and heroines, traditions, rites and rituals, subcultures, institution-specific language) which encourages responsible behavior and communicates to students "how the institution works" and what is expected of them; policies and practices that hold students responsible for their own behavior and the quality of campus life; and students who expect one another to act responsibly in accordance with the institution's expectations.